Math Teachers Press, Inc.

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SOUTH CAROLINA ACADEMIC STANDARDS FOR MATHEMATICS CORRELATED TO *MOVING WITH MATH EXTENSIONS GRADE 5*

		Student Book	Skill Builders
	MATHEMATICAL PROCESSES		
5-1:	The student will understand and utilize the mathematical processes of problem solving, reasoning and proof, communication, connections, and representation.		
5-1.1	Analyze information to solve increasingly more sophisticated problems.	26	
5-1.2	Construct arguments that lead to conclusions about general mathematical properties and relationships.	8	
5-1.3	Explain and justify answers based on mathematical properties structures, and relationships.	8	
5-1.4	Generate descriptions and mathematical statements about relationships between and among classes of objects.	61	
5-1.5	Use correct, clear, and complete oral and written mathematical language to pose questions, communicate ideas, and extend problem situations.	4	
5-1.6	Generalize connections between new mathematical ideas and related concepts and subjects that have been previously considered.	7	
5-1.7	Use flexibility in mathematical representations.	46	
5-1.8	Recognize the limitations of various forms of mathematical representations.		
	NUMBER AND OPERATIONS		
5-2:	The student will demonstrate through the mathematical processes an understanding of the place value system; the division of whole numbers; the addition and subtraction of decimals; the relationships among whole numbers, fractions, and decimals; and accurate, efficient, and generalizable methods of adding and subtracting fractions.		

5-2.1	Analyze the magnitude of a digit on the basis of its place value, using whole numbers and decimal numbers through thousandths.	1, 2, 42, 43	1-1, 23-1
5-2.2	Apply an algorithm to divide whole numbers fluently.	19, 20	9-1
5-2.3	Understand the relationship among the divisor, dividend, and quotient.	19	
5-2.4	Compare whole numbers, decimals, and fractions by using the symbols <, >, and =.	3, 32, 44	2-1, 24-1
5-2.5	Apply an algorithm to add and subtract decimals through thousandths.	46, 47	26-1
5-2.6	Classify numbers as prime, composite, or neither.		4-1
5-2.7	Generate strategies to find the greatest common factor and the least common multiple of two whole numbers.	7, 36	
5-2.8	Generate strategies to add and subtract fractions with like and unlike denominators.	33, 34, 37, 38	15-1 to 15-3, 17-1 to 17-4
5-2.9	Apply divisibility rules for 3, 6, and 9.		
	ALGEBRA		
5-3:	The student will demonstrate through the mathematical processes an understanding of the use of patterns, relations, functions, models, structures, and algebraic symbols to represent quantitative relationships and will analyze change in various contexts.		
5-3.1	Represent numeric, algebraic, and geometric patterns in words, symbols, algebraic expressions, and algebraic equations.		44-1
5-3.2	Analyze patterns and functions with words, tables, and graphs.		
5-3.3	Match tables, graphs, expressions, equations, and verbal descriptions of the same problem situation.		
5-3.4	Identify applications of commutative, associative, and distributive properties with whole numbers.	8	5-1, 5-2
5-3.5	Analyze situations that show change over time.		
	GEOMETRY		

5-4:	The student will demonstrate through the mathematical processes an understanding of congruency, spatial relationships, and relationships among the properties of quadrilaterals.		
5-4.1	Apply the relationships of quadrilaterals to make logical arguments about their properties.		
5-4.2	Compare the angles, side lengths, and perimeters of congruent shapes.		
5-4.3	Classify shapes as congruent.		32-2
5-4.4	Translate between two-dimensional representations and three-dimensional objects.		39-1
5-4.5	Predict the results of multiple transformations on a geometric shape when combinations of translation, reflection, and rotation are used.		
5-4.6	Analyze shapes to determine line symmetry and/or rotational symmetry.		
	MEASUREMENT		
5-5:	The student will demonstrate through the mathematical processes an understanding of the units and systems of measurement and the application of tools and formulas to determine measurements.		
5-5.1	Use appropriate tools and units to measure objects to the precision of one-eighth inch.		
5-5.2	Use a protractor to measure angles from 0 to 180 degrees.		37-1
5-5.3	Use equivalencies to convert units of measure within the metric system: converting length in millimeters, centimeters, meters, and kilometers; converting liquid volume in milliliters, centiliters, liters, and kiloliters.		41-1, 42-1
5-5.4	Apply formulas to determine the perimeters and areas of triangles, rectangles, and parallelograms.		
5-5.5	Apply strategies and formulas to determine the volume of rectangular prisms.	59	
5-5.6	Apply procedures to determine the amount of elapsed time in hours, minutes, and seconds within a 24-hour period.	60	40-1
5-5.7	Understand the relationship between the Celsius and Fahrenheit temperature scales.		

5-5.8	Recall equivalencies associated with length, liquid volume, and mass: 10 millimeters = 1 centimeter, 100 centimeters = 1 meter, 1000 meters = 1 kilometer; 10 milliliters = 1 centiliter, 100 centiliters = 1 liter, 1000 liters = 1 kiloliter; and 10 milligrams = 1 centigram, 100 centigrams = 1 gram, 1000 grams = 1 kilogram.		41-1, 42-1
	DATA ANALYSIS AND PROBABILITY		
5-6:	The student will demonstrate through the mathematical processes an understanding of investigation design, the effect of data-collection methods on a data set, the interpretation and application of the measures of central tendency, and the application of basic concepts of probability.		
5-6.1	Design a mathematical investigation to address a question.	22	
5-6.2	Analyze how data-collection methods affect the nature of the data set.		
5-6.3	apply procedures to calculate the measures of central tendency (mean, median, and mode).	21, 22	46-1, 46-2
5-6.4	Interpret the meaning and application of the measures of central tendency.		
5-6.5	Represent the probability of a single-stage event in words and fractions.		47-2
5-6.6	Conclude why the sum of the probabilities of the outcomes of an experiment must equal 1.		